



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Uwe Marx et al.  
Serial No: 10/622,502  
Filing Date: July 18, 2003  
Title: Method and device for cultivating at high densities and for obtaining  
of products from these cells  
Examiner: Law Office:

January 6, 2004

Attorney's docket No.: Weh212ID

**SUBMISSION TO THE INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR § 1.97.**

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

SIR:

Applicants are respectfully submitting the references cited in the  
Application:

-US 3,821,087

-US 4,804,628

-US 4,857,464

-DE 34 09 501

-DE 24 31 450

-DE 42 30 194

-DE 195 20 188

-Knazek R.A."Solid tissue masses formed in vitro formed cells  
cultured on artificial capillaries" Federation Proc. 33 (8): pp. 1978-1981  
(1974)

-Piret J. M., Cooney C.L. "Immobilized mammalian cell cultivation in hollow fiber bio-reactors" Biotechnol. Adv. 8: 763-783 (1990)

-Lipman N.S., Jackson L.R. "Hollow fibre bioreactors: an alternative to murine ascites for small scale (<1 gram) monoclonal antibody production" Res Immunol July-August; 149(6): 571-6 (1998)

-Flores H.E., Hoy M.W., Pickard J.J. "Secondary metabolites from root cultures" Tibtech. 5:64-69 (1987)

-Liu C.Z., Wang Y.C., Zhao B., Guo C., Ouyang F., Ye H.C., Li G.F. "Development of a nutrient mist bioreactor for growth of hairy roots" In Vitro Cell Dev Biol- Plant May-June; 35:271-74 (1999)

-Wyslouzil B.E., Whipple M., Chatterjee C., Walcerz D.B. Weathers P.J., Hart D.P. "Mist deposition onto hairy root cultures: aerosol modeling and experiments" Biotechnol Prog. March-April; 13(2): 185-94 (1997)

-Friberg J.A., Weathers P.J., Gibson D.G. "Culture of amebocytes in a nutrient mist bioreactor" In Vitro Cell Dev Biol. March: 28A(3 Pt 1): 215-7 (1992).

Applicants also enclose the references cited in the Office Action issued by the German Patent Office.

Copies of the following references cited in the German Office Action are enclosed herewith:

-US 4,225,671

-US 4,857,464

-US 5,416,022

-DE 34 09 501

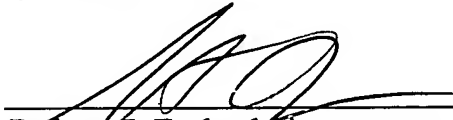


-DE 41 16 727  
-DE 295 20 294  
-EP 0 359 900  
-WO 89/11529  
-WO 01/04262

The above recited references taken alone or in combination are  
believed to neither anticipate nor to render obvious the present application.

Respectfully submitted,  
Uwe Marx et al.

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Reg.No. 29,536, Docket No: WEH212

\*/am



**Documents cited in Application US-Ser.-No. 10/622,502:**

<b>U.S. Patent Documents</b>					
Document Number	Date	Name	Class	Sub Class	Filing date
3,821,087	06/28/74	Knazek	195	127	05/18/72
4,804,628	02/14/89	Cracauer	435	240	08/19/87
4,857,464	08/15/89	Weathers	435	240	02/21/86
<b>Foreign Patent Documents</b>					
Document Number	Filing date	Country	Publ. date	Class	Translation
DE 34 09 501 A1	03/15/84	Germany	10/24/85	C12N5/02	Abstract
DE 24 31 450 A1	07/01/74	Germany	01/23/75	C12K9/00	US 3,997,396
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<b>Other Documents</b>					
Knazek R.A. "Solid tissue masses formed in vitro formed cells cultured on artificial capillaries" Federation Proc. 33 (8): pp. 1978 – 1981 (1974)					
Piret J.M., Cooney C.L. "Immobilized mammalian cell cultivation in hollow fiber bio-reactors" Biotechnol. Adv. 8: 763-783 (1990)					
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Flores H.E., Hoy M.W., Pickard J.J. "Secondary metabolites from root cultures" Tibtech. 5:64-69 (1987)					
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Wyslouzil B.E., Whipple M., Chatterjee C., Walcerz D.B., Weathers P.J., Hart D.P. "Mist deposition onto hairy root cultures: aerosol modeling and experiments" Biotechnol Prog. Mar-Apr;13(2):185-94 (1997)					
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**Documents cited in first Office action by the German Patent Office:**

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